U.S. Apln. No. 09/726,867
Response submitted with RCE

PATENT
Attorney Docket No. 450100-02887

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I.   STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1 and 10-19 are currently pending. Claims 1, 10, and 19, which are independent, are hereby amended. Claims 2-9 are canceled without prejudice or disclaimer of subject matter. It is submitted that these claims, as originally presented, were in full compliance with the requirements of 35 U.S.C. §112. Support for this amendment is provided throughout the Specification. No new matter has been introduced by this amendment. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II.   REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1, 3, 10, 12, and 19 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,614,987 to Ismail, et al. (hereinafter, merely "Ismail") in view of U.S. Patent No. 6,581,207 to Sumita, et al. (hereinafter, merely "Sumita").

Claim 11 was rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Ismail and Sumita as applied to claims 1 and 10, and further in view of Dunlop ("The Effects of

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Accessing Non-matching Documents on Relevance Feedback") and U.S. Patent No. 6,408,295 to

Aggarwal, et al. (hereinafter, merely "Aggarwal").

Claims 13-15 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over

Ismail and Sumita, as applied to claims 3 and 12, and further in view of U.S. Patent No.

6,005,561 to Hawkins, et al. (hereinafter, merely "Hawkins").

Claim 16 was rejected under 35 U.S.C. 103(a) as allegedly unpatentable over

Ismail and Sumita as applied to claim 12, and further in view of U.S. Patent No. 6,457,010 to

Eldering, et al. (hereinafter, merely "Eldering") and further in view of U.S. Patent No. 6,185,360

to Inoue, et al. (hereinafter, merely "Inoue").

Claim 17 was rejected under 35 U.S.C. 103(a) as allegedly unpatentable over

Ismail and Sumita as applied to claim 12, and further in view of U.S. Patent No. 6,266,664 to

Russel-Falla, et al. (hereinafter, merely "Russel-Falla") and still further in view of Inoue.

Claim 18 was rejected under 35 U.S.C. 103(a) as allegedly unpatentable over

Ismail and Sumita as applied to claims 1 and 10, and further in view of Eldering.

III.   RESPONSE TO REJECTIONS

Claim 1 recites, *inter alia*:

> "…said selection information is expressed with an n-
> dimensional vector S comprising user preference items as
> elements,
>
> wherein each element identifies a preference intensity of a
> corresponding element in the n-dimensional vector A,
>
> wherein an element of vector A identifies a positive value
> as an attribute intensity when the user has demonstrated a
> positive preference for the element and indentifies a

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> negative value as an attribute intensity when the user has
> demonstrated a negative preference for the element,
>
> wherein an element of vector S identifies a positive value
> as a preference intensity when the user has demonstrated a
> positive preference for the element and indentifies a
> negative value as a preference intensity when the user has
> demonstrated a negative preference for the element…"
> (Emphasis added)

Generally, claim 1 relates to selecting digital contents via a filtering process by performing an inner product operation between the attribute information's vector A indicating attributes of digital contents and the selection information's vector S indicating user preferences. An element of vector A identifies a positive value as an attribute intensity when the user has demonstrated a positive preference for the element and indentifies a negative value as an attribute intensity when the user has demonstrated a negative preference for the element. An element of vector S identifies a positive value as a preference intensity when the user has demonstrated a positive preference for the element and indentifies a negative value as a preference intensity when the user has demonstrated a negative preference for the element, and

Applicants note that the Office Action relies on Ismail to teach these features.

However, Ismail does not teach the above-identified features of claim 1.

Cited portions of Ismail as allegedly teaching the above-identified features above are reproduced below:

Ismail, column 3, line 43- column 4, line 12 states:

"Attribute information 107 for any particular program varies depending on the program type, but typically includes a plurality of categories such as start time for the program, duration of the program, the title of the program and other attributes (categories) of the program, together with an associated value corresponding to each of the categories. Preference agent 110 processes the attribute information 107 to generate "category-value" pairs 115 . For example, if

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an attribute for a program is duration, then the category may be duration and the value for that category may be 120 minutes. If the attribute for a program is title, then the category may be title and the value may be "Star Wars." Other category-value pairs for a movie may include a description category with a short description of the movie being the value, a primary actor category with the names of the primary stars of the movie being the values, a director category with the name of the director being the value, a theme category with the theme such as adventure, comedy being the value, and a ratings category with ratings by particular critics being the value. Category-value pairs for a sports game, such as a football game, may include names of the teams who are playing, the location of the game, and the specific tournament, such as the play-offs, or Superbowl, etc.

The category-value pairs 115 (preference information) are indicative of viewing preferences of the user. The data shown in FIG. 1 as being associated with the category—value pairs 115 contains weighting information for the associated category value, in addition to other information shown by way of example further below. Preference agent 110 maintains the preference information 115 in the form of a preference database 116 . Television programs 105 recorded by the system 100 are preferably stored separately together with the associated attribute information 107 . In an alternative embodiment, the category value pairs 115 (with or without the associated values) are stored with the television programs 105 and the raw attribute information 107 is not maintained by the system 100 .

Preference agent 110 generates, in response to user viewing habits, data for each category stored in preference database 116 and for each value of each category. The data generated by preference agent 110 for each category and value is preferably indicative of the amount of time that the particular category and/or value is watched by the user relative to the total amount of time that the particular category and/or value is available to be watched. The relative amount of time that a program is watched by a user is a convenient indication of the user's relative viewing preference. However, other indications of user viewing preferences may also be used. Program source switch 114 operates in response to user inputs 102 to select either presently broadcasted programs, by way of television signal 104 or stored programs from storage devices 106 ."

In the above-cited portion of Ismail, the value is positive as it is "a relative amount of time that a program is watched."

Column 6, lines 52-67 of Ismail states:

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"Categories in the preference database 116 are either predefined, such as those received from third-party sources, or are dynamically created from attribute information 107 received for programs 105 . Categories, and associated values, that are dynamically created are preferably given a default rating by preference database 116 . An example of the preference information created by preference agent 110 or downloaded to preference agent 110 is shown below. In the following example, the three columns of numbers in the category statistics and value statistics portions indicate weighting (in a range of 0 to 1000), duration watched (in seconds) and amount of time that programs matching that particular category or value was available (in seconds). The information is preferably stored in the form of database records."

The value in the above-cited portion of Ismail is clearly > 0, and therefore, not a negative value. Such disclosure does not render claim 1 unpatentable.

Column 9, line 59 – column 10, line 31 of Ismail is reproduced below:

"Recording manager 112 causes recording of programs 105 by periodically initiating a sequence of steps shown in FIG. 2 . At 201 , recording manager 112 sends a request to preference agent 110 for ratings of all programs at a particular time (X), or alternatively, for ratings of all programs within a particular time period (X). By way of example, the steps shown in FIG. 2 may be performed every six hours. In certain embodiments, the frequency with which the steps in FIG. 2 are performed may be changeable by the user. Preference agent 110 responds at step 202 by providing ratings, from preference database 116 , for each program received from recording manager 112 . Recording manager 112 then causes recordation of the programs at time X, or within time period X in accordance with the ratings received from preference agent 110 . Specifically, programs having the highest rating are given highest preference for recordation and programs having the lowest rating are given lowest preference to recordation. The recordation is subject to storage capacity constraints. For example, if the highest rated program is one-hour long, and only thirty minutes of recording space is available on storage devices 106 , then the one-hour program is skipped and the highest rated thirty-minute program is recorded.

Highest priority for recording of programs is given to programs specifically requested by the user. For example, if the user identifies a particular program for recording, such as by specifying the date, time and channel, or by specifying an identification code for the program, recordation of that program is given priority over programs rated by the preference agent. Next highest priority is given to programs matching particular category-value pairs specified by the user. For example, if the user does not identify a particular program, but specifies that one-hour long documentaries pertaining to travel should be recorded, then recordation of programs matching such category-value pairs is given priority over programs rated by the preference agent 110 . In alternative embodiments, relative priority between user-specified programs, user-specified category-value pairs and programs rated by the preference agent 110 is changeable by the user."

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Above-cited portions of Ismail teaches that certain rating may suggest one program may be prioritized over another based on preference information.

Vector A of claim 1 comprises elements, wherein each element of vector A identifies a positive value as an attribute intensity when the user has demonstrated a positive preference for the element and indentifies a negative value as an attribute intensity when the user has demonstrated a negative preference for the element.

This is distinct from Ismail because in Ismail, the elements are positive and identify "a relative amount of time that a program is watched."

Applicants submit that Ismail and Sumita, taken either alone or in combination, do not teach or suggest the above-identified features of claim 1.

Therefore, Applicants submit that independent claim 1 is patentable.

For reasons similar to, or somewhat similar to, those described above with regard to independent claim 1, independent claims 10 and 19 are also patentable.

IV. DEPENDENT CLAIMS

The other claims are dependent from one of the independent claims, discussed above, and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

Similarly, because Applicants maintain that all claims are allowable for at least the reasons presented hereinabove, in the interests of brevity, this response does not comment on each and every comment made by the Examiner in the Office Action. This should not be taken

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as acquiescence of the substance of those comments, and Applicants reserve the right to address such comments.

CONCLUSION

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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